

Teamwork is Key in the Florida Keys

o man is an island, entire of itself' goes the familiar saying by English author John Donne. When it comes to the Florida Keys, no island is entire of itself either. Linked by more than bridges, the many islands that make up this 110-mile chain share a subtropical climate, breathtaking beauty and a fragile

ecosystem. They also share a thriving tourist economy and the many challenges of growth.

"Teaming with each other and with universities and government agencies, the Keys are making great achievements that would be difficult – if not impossible – to accomplish on their own," said Islamorada resident and SFWMD Governing Board Member Michael Collins. "The South Florida Water Management District is an active partner in many Keys programs."



Bridges connect all the main islands of the Florida Keys, creating an extended community 110 miles long. Partnerships among the islands and many supportive agencies are helping the Keys to protect the area's unique natural resources.

DISCOVER THE ENVIRONMENT . . . AT THE ECO-DISCOVERY CENTER

One of the most exciting partnership projects will inspire residents and visitors to become good stewards of the Keys' unique environment. That is the goal of a new \$8.4 million environmental complex being built in Key West. With funds appropriated by Congress, the three-building Dr. Nancy Foster Environmental Complex will include the Florida Keys Eco-Discovery Center, a world-class educational center opening in the summer of 2005.

The Florida Keys Eco-Discovery Center will grace the shoreline near the public pier, where cruise ship passengers first step into town. The planned extension of the Key West Harbor Walk will terminate at the center, where 6,000 square feet of exhibits will depict the biodiversity of the Florida Keys, interconnected with the greater Kissimmee-Okeechobee-Everglades ecosystem, management of protected marine areas, wonders of the ocean and the rich, local maritime history.

The Florida Keys National Marine Sanctuary of the National Oceanic and Atmospheric Administration (NOAA) will operate the Eco-Discovery Center. The National Marine Sanctuary Foundation, a private, non-profit group, is fostering further collaborations by leading a \$1.5 million public–private partnership campaign to outfit the Eco-Discovery Center with state-of-the-art exhibits. Corporate, environmental, community and philanthropic sponsors have been identified, as have four government agency partners: NOAA, the National Park Service, the U.S. Fish and Wildlife Service and the South Florida Water Management District.

The District will provide funds for the design and construction of



Artist's rendering of the Florida Keys Eco-Discovery Center

the front entrance exhibit highlighting South Florida ecosystem restoration efforts, including the Comprehensive Everglades Restoration Plan, and the overall relationship of the Keys with the greater Everglades ecosystem. These exhibits will ensure that the public is informed of government agencies' efforts to evaluate, enhance and restore the fragile natural resources of South Florida.

SINGING IN THE SHOWER

No matter what your tune, taking a shower will now send less wasted water down the drain, thanks to a showerhead retrofit program funded by the District. The Water Demand Conservation Cooperative Funding Program has enabled the Florida Keys Aqueduct Authority (FKAA) to take the first step in launching showerhead retrofits throughout the Florida Keys. The installation of low-flow showerheads in hotels and motels practically guarantees a sizeable water savings, considering the number of tourists visiting the Keys each year.

The FKAA also received funding from the District to roll out a water conservation outreach campaign. Joined by yet another partner, the Key West Department of Transportation, the FKAA wrapped four buses with vibrant photographs and an important message: "Florida's Water – It's Worth Saving." In addition, conservation-themed artwork now decorates three billboards in the Keys as well as bus shelters in Key West.

EVERGLADES RESTORATION TOUCHES KEYS RESIDENTS, TOO

When it comes to partnerships, Everglades restoration practically sets the standard for collaboration. Eight separate agencies are working together to support outreach activities of the Comprehensive Everglades Restoration Plan. In addition to the District, the following organizations are part of the outreach partnership:

- National Oceanic and Atmospheric Administration, including the Atlantic Oceanographic Meteorological Laboratory, Florida Keys National Marine Sanctuary and Southeast Fisheries Science Center
 - Florida Department of Environmental Protection
 - Everglades and Dry Tortugas National Parks
 - Florida Keys Community College
 - Florida Sea Grant
 - U. of Florida Institute of Food and Agricultural Sciences
 - Florida Keys Aqueduct Authority

Goals of the partnership are to integrate Everglades restoration information into existing education and outreach programs, to present scientific information to the public and to promote community involvement in environmental challenges. This multiagency effort proves that teamwork, especially in the Keys, is the key to progress.

Nitrogen in Florida Bay: A Challenging Puzzle

Between mainland Florida and the long string of Florida Keys lies shallow, picturesque Florida Bay. Sunsets over these mangrove-dotted waters are the subject of postcards and gallery showings. But what lies beneath the bay's oft-photographed surface?



That's what South Florida Water Management District scientists are working diligently to find out. More than a decade of water quality monitoring by the District is forming the basis for understanding Florida Bay's complexities. Patterns of water movement in the bay are remarkably intricate, defying simple explanations of water quality concerns. Scientific data show relatively high levels of nutrients, particularly nitrogen, in some locations. Whether natural or caused by human activity – and whether the bay's ecosystem is impacted – is still uncertain.

"Fortunately, science is filling in the gaps," said SFWMD Governing Board Member Michael Collins. "As part of Everglades restoration, District scientists, working in partnership with other state and federal agencies and several universities, are creating a computer model of water movement in Florida Bay." The Florida Bay and Florida Keys Feasibility Study (www.evergladesplan.org/pm/studies/fl_bay.cfm), which includes this hydrodynamic model plus water quality and ecological models, is synthesizing vast quantities of information about the bay and coral reef ecosystems. One of the goals is to evaluate the significance of nitrogen from Everglades waters on these ecosystems and to ensure that the bay will not be harmed as various Everglades restoration options are considered. In addition, results from the feasibility study will be used to make recommendations for restoring the bay itself, largely through restoring the quantity, timing and distribution of freshwater flow into Florida Bay as part of the Comprehensive Everglades Restoration Plan.